In the Claims

1. (currently amended) A system for receiving data signals, said system comprising:

a plurality of dumb ~~node~~ nodes, each dumb node comprising a radio receiver including a baseband processor for accepting a spread spectrum signal and for providing therefrom serial data signals composed of data frames each including a packet payload;

a decoder;

a plurality of physical ~~link~~ links, each physical link having a first end at one of said radio ~~receiver~~ receivers and a second end at said decoder, for conveying said serial data signals from said radio receiver to said decoder;

an encapsulator at said first end for encapsulating said data frames within Ethernet frames to be transmitted across the physical link only;

a de-encapsulator at said second end for receiving said Ethernet frames from said link and de-encapsulating said Ethernet frames to recover said data frames; and

an intelligent node including said de-encapsulator, said decoder, a protocol processor for developing addressed Ethernet data packets from said data frames, and a bridge for coupling said addressed Ethernet data packets to a network.

2. Cancelled

3. (previously presented) A system as in claim 1 wherein said encapsulator includes means for tagging said data frames before they are encapsulated

2

within said Ethernet frames.

4. (previously presented) A system as in claim 1 wherein said encapsulator inserts at least one of said data frames followed by padding data into a message section of one of said Ethernet frames.

5. Cancelled.

6. (currently amended) A system for receiving data signals and coupling data signals to an Ethernet network, said system comprising:

a plurality of dumb ~~node~~ nodes, each dumb node comprising a radio receiver and an encapsulator, said radio receiver including a baseband processor for providing serial data signals composed of data frames each including a packet payload, and said encapsulator including means for encapsulating said data frames within temporary Ethernet frames;

an intelligent node comprising a de-encapsulator, and a protocol processor for providing addressed Ethernet packets for transmission in said network; and

a plurality of physical ~~link~~ links, each physical link coupling one of said dumb ~~node~~ nodes with said intelligent node;
wherein:

said encapsulator is coupled to said physical link to send said temporary Ethernet frames across the physical link only to said de-encapsulator;

said de-encapsulator includes means for receiving temporary Ethernet frames from said link and de-encapsulating said temporary Ethernet frames

3

to recover said data frames; and

said protocol processor includes means for converting said data frames into said addressed Ethernet packets.

7. (previously presented) A system as in claim 6 wherein said encapsulator includes means for tagging said data frames before they are encapsulated within said temporary Ethernet frames.

8. (previously presented) A system as in claim 6 wherein said encapsulator includes means for inserting at least one of said data frames followed by padding data into a message section of one of said temporary Ethernet frames.

9. (previously presented) A system as in claim 6 wherein said dumb node includes a multiplexer for multiplexing host controller interface data with pulse-code modulated voice data into said data frames.

10. (currently amended) A method of receiving signals and transmitting signals over a local area network, comprising:

receiving, at one of a plurality of dumb nodes, a spread-spectrum signal containing message data and converting said spread-spectrum signal into serial data frames conforming to a host controller interface format;

encapsulating said serial data frames into Ethernet frames;

conveying said Ethernet frames ~~over a~~ over one of a plurality of physical ~~link~~ links only, each of said plurality of physical links coupling one of said plurality of dumb nodes to an intelligent node ;

4

receiving, at said intelligent node, said Ethernet frames from said

physical link;

de-encapsulating, at said intelligent node, said Ethernet data frames to

provide recovered serial data frames;

developing ~~by means~~ , by means of a protocol processor at said

intelligent node, addressed Ethernet data packets from said recovered serial

data frames; and

forwarding, from said intelligent node, said addressed Ethernet data

packets to said local area network.

11. (cancelled)

12. (cancelled)